Appin. No.: 10/750,131

Amendment Dated August 17, 2007 Reply to Office Action of June 15, 2007

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

- 1. (Currently Amended) An endoluminal <u>implant</u> <u>device-comprising</u> a plurality of continuous filaments braided together, at least one filament comprising at least one first region having a first cross-sectional area and at least one second region having a second cross-sectional area, wherein the first cross-sectional area is larger than the second cross-sectional area.
- 2. (Currently Amended) The <u>implantendoluminal device</u> of claim 1, wherein the at least one filament comprises a step-change between the first region and the second region.
- 3. (Currently Amended) The <u>implantendoluminal device</u> of claim 1, wherein all of the plurality of continuous filaments comprise a step-change between each first region and each second region.
- 4. (Currently Amended) The <u>implantendoluminal device</u> of claim 1, wherein the at least one filament comprises a tapered filament.
- 5. (Currently Amended) The <u>implantendoluminal device</u> of claim 1, wherein all of the plurality of continuous filaments comprise tapered filaments.
- 6. (Currently Amended) The <u>implantendoluminal device</u> of claim 1, wherein the <u>implantendoluminal device</u> comprises an end having atraumatic end windings.
- 7. (Currently Amended) The <u>implantendoluminal device</u> of claim 1, wherein the at least one filament comprises a circular cross-section.
- 8. (Currently Amended) The <u>implantendoluminal-device</u> of claim 1, wherein the at least one filament comprises a non-round cross-section.
- 9. (Currently Amended) The <u>implantendoluminal device</u> of claim 1, wherein the <u>implantendoluminal device</u> tapers from a first end having a first diameter to a second end having a second diameter smaller than the first diameter.

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10. (Currently Amended) The <u>implantendoluminal device</u> of claim 1, wherein the at least one filament further comprises a third region having a cross-sectional area intermediate the first and second cross-sectional areas.

- 11. (Currently Amended) The <u>implantendoluminal device</u> of claim 1, wherein a first end of the <u>implantendoluminal device</u> has a first diameter and a second end of the <u>implantendoluminal device</u> has a second diameter smaller than the first diameter.
- the <u>implantendoluminal device</u> comprises the first region of the filament having the first cross-sectional area at the first end of the <u>implantendoluminal device</u> and the second region of the filament having the second cross-sectional area at the second end of the <u>implantendoluminal</u> device.
- 13. (Currently Amended) The <u>implant</u>endoluminal device of claim 12, wherein the <u>implant</u> endoluminal device comprises an intermediate portion having a third diameter intermediate the first and second diameters, and the intermediate portion comprises a third region of the at least one filament having a third cross-sectional area intermediate the first and second cross-sectional areas.
- 14. (Currently Amended) The <u>implantendoluminal device</u> of claim 1 wherein the <u>implant endoluminal device</u>-comprises a first portion and a second portion, wherein the second portion is more flexible than the first portion and comprises the second region of the at least one filament having the second cross-sectional area.
- 15. (Currently Amended) The <u>implantendoluminal device</u> of claim 1 wherein the filaments comprise wire.
- 16. (Currently Amended) The <u>implantendoluminal device</u> of claim 15 wherein the wire comprises one of: nitinol or stainless steel.
- 17. (Currently Amended) The <u>implant endoluminal device</u> of claim 1 wherein the filaments comprise polymeric material.

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18. (Currently Amended) The <u>implant endoluminal device</u> of claim 1 wherein the <u>implantendoluminal device</u> comprises a radially compressed configuration for introduction into a lumen and a radially expanded configuration for deployment within the lumen.

- 19. (Currently Amended) The <u>implant endoluminal device</u> of claim 18 wherein the <u>implantendoluminal device</u> is expandable between the radially compressed configuration and the radially expanded configuration by one of: balloon expansion, self-expansion via spring elasticity, or self-expansion via a thermally or stress-induced return of a pre-conditioned memory material.
- 20. (Currently Amended) The <u>implant endoluminal device</u> of claim 1 wherein the <u>implantendoluminal device</u> comprises one of: a 1:1 single filament braiding ratio, a 2:2 single filament braiding ratio, or a 1:1 paired filament braiding ratio.
- 21. (Currently Amended) The <u>implantendoluminal device</u> of claim 1 further comprising a body and a plurality of legs, wherein at least a first leg portion of each leg comprises a discrete plurality of continuous filaments braided together and at least a first body portion of the body comprises at least one of said continuous filaments from each discrete plurality of continuous filaments braided together.
- 22. (Currently Amended) A method for treating a human being, the method comprising the step of deploying-implanting within a lumen of the human being an endoluminal device comprising a plurality of continuous filaments braided together, at least one filament comprising at least one first region having a first cross-sectional area and at least one second region having a second cross-sectional area, wherein the first cross-sectional area is larger than the second cross-sectional area.
- 23. (Previously Presented) A process for constructing a braided, branched stent having a body and a plurality of legs, each leg comprising a discrete plurality of continuous filaments, the process comprising the steps of:
- a) braiding each plurality of continuous filaments to individually form at least first leg portions of each of the legs; and
- b) braiding at least one filament from each plurality of continuous filaments together to form a first body portion of the body;

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wherein at least one braiding step comprises braiding the stent using at least one tapered filament comprising at least one first region having a first, relatively larger cross-sectional area and at least one second region having a second, relatively smaller cross-sectional area.

- 24. (Previously Presented) The process of claim 23 comprising braiding each braided portion of each leg using one of the second regions of the tapered filament and braiding the braided portion of the body using the first region of the tapered filament.
- 25. (Previously Presented) The process of claim 23 comprising braiding each braided portion of each leg using one of the first regions of the tapered filament and braiding the braided portion of the body using the second region of the tapered filament.
- 26. (Previously Presented) The process of claim 23 comprising prior to steps (a) and (b), winding each tapered filament between two bobbins such that a first end of the filament is wound on a first bobbin and a second end of the filament is wound on a second bobbin, and positioning a midpoint of the filament on the mandrel to form an apex at an end of the stent.
- 27. (Previously Presented) The process of claim 26, wherein the first end is located within one of the second regions having the second, relatively smaller cross-sectional area and the second end is located within another of the second regions and the midpoint of the filament is located within the first region having the first, relatively larger cross-sectional area.
- 28. (Previously Presented) The process of claim 26, wherein the first end is located within one of the first regions having the first, relatively larger cross-sectional area and the second end is located within another of the first regions and the midpoint of the filament is located within the second region having the second, relatively smaller cross-sectional area.
- 29. (New) An endoluminal device comprising a plurality of continuous filaments braided together, at least one filament comprising at least one first region having a first cross-sectional area and at least one second region having a second cross-sectional area, wherein the first cross-sectional area is larger than the second cross-sectional area, wherein the endoluminal device comprises a radially compressed configuration for introduction into a lumen and a radially expanded configuration for implantation within the lumen.

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30. (New) The endoluminal device according to claim 1, wherein the device comprises a stent.

31. (New) An endoluminal device comprising a plurality of continuous filaments braided together, at least one filament comprising at least one first region having a round first cross-section with a first diameter and at least one second region having a round second cross-section with a second diameter, wherein the first cross-section is larger than the second cross-section.